

DETAILED ACTION

Comments

1. The Amendment – After Non-Final Rejection filed on March 19, 2008 has been entered and made of record.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 5 and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim limitation “A computer readable tangible storage medium encoded with a computer readable program configured to said an information processing apparatus to execute a method” does not have proper support in the originally filed disclosure. However, it appears that the “computer readable tangible storage medium” corresponds to the “recording media” described in Page 9 lines 16-18, in which an “image compensation program” is recorded and configured to cause a computer to execute a method. It should also be noted that the “image-compensation programs” described in the specification is indeed in an

executable format, therefore, it can impart functionality between the interrelated computer components in order to produce the output image.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirosawa et al. (U.S. Pat. No. 6,434,276).

Re claims 1 and 3: Hirosawa et al. disclose an image processor (“Image Synthesis and Communication Apparatus”) comprising: an image input unit (FIG. 1, “Imaging Section **1**”) configured to receive two-dimensional images (“imaging means for inputting images in a time series”, Col. 3 line 4 and Col. 6 lines 5-22); a motion calculator (FIG. 9, “Minimum Value Detecting Section **20**”) configured to select a motion detecting area (“search range”) for each of a first image (“image F1”) and a second image (“image F2”) received by the image input unit, and configured to calculate a motion vector (“motion amount (x, y)”) between the two

images based on projective data that is acquired by computing in a predetermined direction pixel values in the motion detecting areas (Col. 9 lines 36-59); a displacement calculator (FIG. 1, "Correlation Calculating Section 5") configured to calculate image correlativity ("correlation calculation is performed") between a basic image area of the first image and each area of the second image, the each area of the second image is along the direction that the motion vector calculated by the motion calculator designates ("It is preferable to perform the correlation calculation while searching the neighborhood of the region which is corrected by the motion amount of the previous frame."), and configured to calculate the amount of pixel displacement ("motion amount"), based on the correlativity calculation (Col. 8 line 19 through Col. 9 line 35); and an image output unit (FIG. 1, "Image Synthesizing Section 36") to cut away from a camera-shake compensation area designated in the second image ("portion on the image F2 which portion does not overlap with the image F1") based on the pixel-displacement amount calculated by the displacement calculator, and configured to output the area as an image for the image output area of the second image (Col. 11 line 3 through Col. 14 line 43).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al.

As to claim 5, Hirose et al. does not explicitly disclose a computer readable tangible storage medium encoded with a computer readable program configured to cause an information processing apparatus to execute a method, the method comprising: an image inputting step; a motion calculating step; a displacement calculating step; and an image outputting step.

However, in view of Hirose et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method steps of image inputting, motion calculating, displacement calculating and image outputting (Col. 3 line 4 and Col. 6 lines 5-22, Col. 8 line 19 through Col. 9 line 59, and Col. 11 line 3 through Col. 14 line 43) in a computer readable tangible storage medium such as a CD-ROM, which is very well known in the art, in order to be readily available to use with conventional personal computer systems.

Allowable Subject Matter

8. Claims 2 and 4 are allowed.

Claim 6 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: the closest prior art made of record fails to teach or suggest a conversion/compensation unit/step for calculating pivoting and zooming components by means of the plurality of motion vectors calculated by the motion calculator, and for applying pivoting and zooming conversion to the second image, based on the pivoting and zooming components, and for acquiring a compensated motion vector by subtracting the pivoting and zooming components from the plurality of motion vectors..

Response to Arguments

Claim Objections

9. Claims 1, 3 and 5 have been amended to recite “the second image” in order to correct informality. Therefore, the objections have been withdrawn.

Claim Rejections under 35 U.S.C. §112

10. Claims 1 and 4 have been amended to recite “the correlativity calculation”, having proper antecedent basis in the claims. Therefore, the rejections have been withdrawn.

Claim Rejections under 35 U.S.C. §101

11. Claims 5 and 6 have been amended to recite “A computer readable tangible storage medium encoded with a computer readable program configured to cause an information processing apparatus to execute a method”. However, upon further

consideration, the instant amendment does not comply with the written description under 35 U.S.C. §112, first paragraph.

Claim Rejections under 35 U.S.C. §103

12. Applicant's arguments with respect to claims 1, 3 and 5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Keating et al. disclose a Motion Dependent Video Signal Processing.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSE M. TORRES whose telephone number is (571)270-1356. The examiner can normally be reached on M-F: 8:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C. Bella/SPE 2624

/JOSE M. TORRES/ 05/29/2008
Examiner, Art Unit 2624